



# Comparing Writing Process Performance in Sixth Grade Students with and without Language-Learning Disabilities

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## Introduction

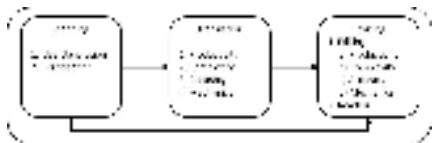
Children with Language-Learning Disabilities (LLD) perform poorer than their peers with typical development (TD) on written language tasks in the areas of: Productivity; Lexical diversity; Sentence complexity; Grammaticality; and Spelling (Apel & Masterson, 2004; Apel, et al., 2004; Dockrell, et al., 2007; Fey, et al., 2004; Gillam & Johnston, 1992; Masterson & Crede, 1999; Mackie & Dockrell, 1992; Nelson & Van Meter, 2007; Scott & Windsor, 2000; Windsor, et al., 2000).

Hayes and Flower (1980) defined writing as a recursive process that includes planning, translating, and revising.

Research suggests that translating comprises: (a) Productivity; (b) Complexity; (c) Accuracy; (d) Mechanics (Puranik, et al., 2008; Wagner, et al., 2011).

Survey research found that writing instruction is conducted in a linear fashion, over extended periods of time (Gilbert & Graham, in press).

The purpose of the present investigation is to compare how these two groups of children (TD, LLD) perform across a three day writing process protocol (Koutsoftas, 2010) designed for this study.



Specific research questions were:

- (a) Are there between group differences on measures representing planning, translating, and revising?
- (b) Are there within group differences from first drafts to final copies?
- (c) How do the two groups differ on type of grammatical and spelling errors?

## Sample

N = 24	TD (n = 12)	LLD (n = 12)
Age in Years	11.50 (.52)	11.83 (.72)
Mother's Ed.	14.33 (1.61)	12.92 (2.78)
Girls : Boys	2 : 10	2 : 10
GRADE Reading Test (Williams, 2001)		
Total Test, SS *	114.92 (11.30)	94.00 (12.76)
Comprehension Composite *	41.92 (5.12)	29.25 (9.37)
Vocabulary, SS *	114.67 (12.03)	94.75 (14.35)
Listening Comprehension	14.92 (1.16)	14.25 (1.76)
Six-Traits Writing Rubric*	20.92 (5.75)	14.25 (3.74)

\* p < .05

## Procedures

- This data is a subset of data from a larger study evaluating the writing process in sixth grade students.
  - 12 students were identified as LLD
  - 12 TD students were matched on classroom, gender, and age
- Writing samples were collected across three days, one for: 1) planning; 2) translating; and 3) revising.



## Discussion

- No differences were observed on planning measures suggesting that the language deficits associated with LLD do not negatively impact planning ability.
- Children with LLD demonstrated poorer performance on some skills related to translating and revising processes of the Hayes and Flower (1980) writing process model; specifically:
  - a) Fewer sentences on final copies
  - b) Poorer spelling accuracy across rough drafts and final copies
  - c) Poorer mechanical accuracy on final copies
- Children with LLD appear similar to their peers with TD on the revision of writing in the areas of: lexical diversity, sentence complexity, and grammatical and spelling accuracy.

Grammaticality, a consistently poor area for children with LLD, showed no difference in frequency or proportion of error type between groups across rough draft and final copies.

Although spelling was poorer in children with LLD from rough draft to final copy, the proportion and type of spelling errors did not appear to change between groups.

Despite the few significant differences between groups on writing process measures, the LLD group received significantly poorer quality ratings on their final copy, with a large effect size (Cohen's d = 1.16).

The findings of this study are exploratory in nature due to the small sample size.

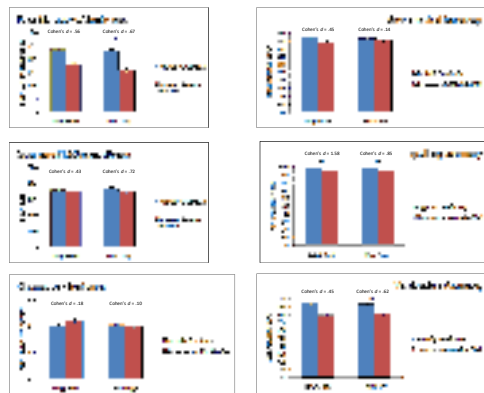
## Results

Planning Measures			
# of Ideas, M (SD)		Complexity, M (SD)	
TD	LLD	TD	LLD
9.08 (11.08)	11.08 (12.78)	.58 (1.00)	.91 (2.07)

Wilks' Lambda = .40, F(2, 21) = 15.76, p = .87

Rough Draft: Wilks' Lambda = .41, F(6, 17) = 4.06, p = .01, partial eta squared = .59

Final Copy: Wilks' Lambda = .50, F(6, 17) = 4.06, p = .04, partial eta squared = .50



\* p < .05



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